Fawaiian Gazette.

H. T., Second-class Matter. SEMI-WEEKLY.

ISSUED TUESDAYS AND FRIDAYS.

WALTER G. SMITH, adhar.

SUBSCRIPTION RATES.
 Per Month
 5.50

 Per Year
 5.00

 Per Year
 6.00

Payable Invariably in Advance.

A. W. PEARSON,

FRIDAY : : : JANUARY 29

THE THEORY AND PRACTICE OF IR-RIGATION.

The vast arid plains of our Western States, which but a few years were thought to be unfit for cultivation, are being rapidly transformed b to fertile fields by the magic of irrigation. The secret of their arid character was found to be the absence of moisture. The fertilizing element was ty mix and knead it with the soil, the rising of vegetable life was retarded or wholly prevented.

Yet there is no lack of rainfall in some of our Western States when these very conditions obtain. In the mountains are dense forests which pre serve from the sun's rays the accumulating rain and discharge it into the creek and river beds. The plains, being destitute of trees and other verdure. offer no resistance to the sun's rays and the moisture is dried up and dis sipated almost immediately.

The problem then is to so regulate the flow and distribution of mountain streams as to give to the high and lov lands alike an even supply of moisture when and where needed. In other words, irrigation turns the desert into a garden, and the swamp into arable ground. It is evident that to accom-plish a work of such magnitude requires the highest engineering skill.

The reader must bear in mind that the lands to be irrigated are frequently found to be considerably higher than the adjoining rivers from which their supplies must be obtained. Thus frequently it becomes necessary to tap the stream at a point many miles nearer its source, and to conduct the water to the irrigated territory by a canal. From this canal, laterals are run through the sections to be irrigated. and from these laterals still others and smaller laterals are extended; always however, bearing in mind that the main laterals must be run in the direction of the general fall of the land, and that only the last or smallest branches should be at right angles to this fall. This is for the obvious reason that the water in the main laterals must have a positive flow, while that in the smallest branches is intended to overflow and run down the surface of the gently sloping ground to the next smalle lateral below. This, in fact, is the final process of irrigation. The Western farmer runs his smallest laterals in shallow ditches at short intervals through the field to be irrigated. A few shovelfuls of earth serve to close the entrances to these ditches until irrigation is needed. At the proper time this earth is removed and the water allowed to flow into the shallow ditches, and thence to overflow onto the tributary ground. As soon as the soil appears to have been sufficiently moistened, the earth is replaced at the mouth of the ditch and the flow of water is stopped. Other more elaborate methods are in use, requiring sluices, dams, and even artificial lifting of water, but the simple method described will be a sufficient illustration of the principle.

The results of irrigation can best be seen by a visit to territory where for cern to anyone. a few years the system has been it operation. In regions which a few years since were but arid wastes, we now see agricultural prosperity of the highest order, with the usual accompaniment of a prosperous and happy community. Moreover, we are told that irrigation gradually changes the entire floral aspect of the irrigated regions, so that plants and flowers, and even fowls and reptiles, which were supposed to be strangers to the locality, become acclimated and take up a permanent

John Alexander Dowie has established a church of which he is Pope and an industrial city of which he is master, and has gathered a great fortune, all by dint of extraordinary personal qualities. In him one discovers that hypnotic faculty, which, in its minor manifestations, is called magnetism, and by which the wills of other men are controlled or overborne. It is a power which does one more good to be born with than riches and which accounts for the careers of most great organizers of men. It also tells why a Dowle or a Brigham Young may bring to the support of astonishing deinsions people who are of the normal type of intelligence and virtue.

Lieut. Commander Pond retains his interest in Pearl Harbor and is doing effective work among high officials to wards having a naval station built there. Unfortunately nothing can be done this winter to get an appropriation for cutting through the projecting spits of coral which make the channel of the harbor tortuous. There will be no River and Harbor bill at this session so Pearl Harbor must wait. Whether the latter will get the money it need at the next session will depend largely upon the Hawalian delegate and th active influence of naval men like Lieut, Commander Pond.

The fact that the Russian Minister of Foreign Affairs has consulted the Japanese envoy with a view of shaping Russia's reply to Japan so as to avoid a conflict, is an unmistakable sign of the Czar's good offices. Such a proaugurs well for the peace of the Orient. | ritory,

A BANKRUPT WORLD.

The financial condition of the world we live in is very bad. The principal countries, including the best colonies, are in the kind of a position which means eventual bankruptcy when applied to the affairs of an individual or a corporation. For example, the total revenue of the countries referred to is set down at \$7,854,301,000 and the total expenditure at \$7,820,540,000. That is to say the world is living beyond its means at the rate of \$85,239,000 per year. At the same time its indebtedness, which presumably, is to be met out of sinking funds, is \$35,000,000,000, the interest on which is nearly a million and a half per annum. Twelve billions of dollars represent the combined stocks of money of which but \$5,355,000,000 is gold and nearly \$3,060,600,000 is uncovered paper. When a man lives beyond his capacity to pay and is in debt nearly four times the amount of good money he possesses, in reserve, the question of his downfall is only one of time. He may stave off creditors awhile but the end is ruin. In the case of the world, the adoption of a scheme of universal repudiation of public debts, wiping the slate clean and beginning again, is one which sconomic writers have long foreseen.

OUTLOOK FOR THE MOSQUITO.

Speaking of the conference held in New York city on December 14 last to organize the war against mosquitoes. Engineering News asserts that the attitude of the public in relation to the movement has now changed from ridicule to respect. It says:

"Such tangible results have now been achieved and the hearty cooperation of such a large number of property owners, entomologists, engineers, sanitarians and public-spirited citizens generally has been secured as to make possible a well-attended conference of representative men, at which papers en various aspects of the mosquito problem were read and steps taken to form a permanent national organization to combat the mosquito nuisance and menace. . . As a confer-ence, the gathering was notable for its many brief and forceful addresses and the character of the men who presented them. As a discussion of a vital, conomic and sanitary question, affecting the comfort, prosperity and health of millions of people, the remarks were distinctly practical rather than theoretical character. Prominent New York men of affairs told of the satisfaction they had derived from money and time expended in exterminating me quitees on their Long Island, Statn Island, and New Jersey estates. Engineers and entomologists told of their part in the study of the problem in its successful solution. No questioned the possibility and easibility of reclaiming any mosquitodected section and of suppressing min malaria and yellow fever, if inlividuals and municipalities would cop rate, and, in the case of large areas. state and perhaps national governments would join in the work. Except for preliminary studies, however, local action alone will generally be sufficient. Once the biological side of the question has been determined, funds nised, and private and public cooperaion secured, the work of mosquito exermination generally resolves itself into the engineering problems of drainage, filling, and, in some cases, the construction of dams or tide-gates to control water-levels. 'Mosquito engineering, as Mr. Henry Clay Weeks, one of the most prominent workers in

to afford many opportunities to engi-neers in the future." It is undeniable that the work of the Mosquito Committee here, though greatly hampered by lack of funds, has been successful. Places which were visited by mosquitoes in swarms a year or two ago now see comparatively few of them. One is safe in saying that if the whole community did its best against the mosquito nuisance, the insect pest would soon be of small con-

this new departure, terms it, promises

Congress will not put a general tariff on coffee because it fears to raise the cost of the American breakfast table. As to bounties there is no satisfaction in them to an agricultural country because the bounty awarded by one Congress may be taken off by another, thus destroying the investments based upon the original law. The most practicable thing for a country situated as this one is, is to obtain for coffee the same benefits that are accorded tea, namely prohibitive duty on the lowest grades This would leave the market for high grade competition, in which these islands would figure well. It is possible that the passage of the national pure food bill would keep the inferior coffee out thus necessitating no change in the tariff laws.

Thoreau, whom the Star lands as a food economist was a good deal of a humbug. When he lived at Walden Pond he was forever haunting the kitchen of a worthy housewife, whose husband was one of his distinguished literary friends, and sampling larder. He was particularly fond of milk and doughnuts. The truth about Thoreau is that, although he kept his table expenses at a minimum, he in-creased those of other people.

Senator Gorman has not helped his Presidential boom in the South by taking an attitude of hostility towards the Panama canal. Southern States practically unanimous for the waterway and have instructed their Senators to vote for it. In setting himself against this tide, Senator Gorman has robbed himself of Presidential avail-

Macedonian plotters always serve notice on their victims. They have proclaimed March 28 as the day of By some oversight they did not put off the uprising until April 1.

Judge Nathaniel of Molokal gets a

GERMANS IN AFRICA.

The Germans in Southwestern Africa are having precisely the same experience with the wild negroes that the American pioneers had with the wild "Terrible outrages," "gen-Indians. eral massacres" and "reigns of terror" are phrases that were familiar to Americans who read frontier news, until within a few years past. From the time of the settlements of Plymouth and Jamestown, to the capture of Geronimo, which marked the culmination of the Indian trouble in America, over 200 years elapsed; and in the last seventy years of active hostilities the army had over 800 Indian fights, to say nothing of those had by settlers.

These statistics are not encouraging to the Germans who have, in the negroes, a vastly greater problem than we once had in the Indians. It has been figured out from the amount of land needed to maintain an Indian who lived chiefly by the chase, that there were not more than 400,000 savages on the continent at the time of the revolutionary war. But the wild negroes of Central and South Africa are believed to number fifty millions. Judging from those who have harassed the British and Boers in turn, the Zulus, Swazis and others, these black men equal the American Indians in martial traits and prowess. They can be dealt with, as the history of the Cape and the Transvaal has proved, but there must be plenty of men for the purpose and "where the lion's skin falls short," as Richelleu says in the play, "we

must eke it out with the fox's." Undoubtedly the Germans will be equal to the task before them unless the climate leagues with the blacks against the white men as is said to be the case the nearer one gets to heart of the dark continent. It was the good fortune of those who wrested North America from the Indians to have the climate to which their race was accustomed; otherwise North America might be today like Brazil in the ratio of its white population to the area of soil. Where the Germans are having their present trouble, the climate is similar to that of Southern Brazil and Paraguay and on the same parallels as northern Australia, and the mortality from disease is very great.

Mayor McClellan stands a better show of getting the Democratic nomination than Mr. Hearst. It would be interesting to see another McClellan run for President on the Democratic ticket if only to note the different ways that a father and son would take defeat.

The troubles the electric company are having with Congress over its franchise are as nothing to the troubles Hawall would have in getting amendments made to a Federal county law.

Longstreet at Gettysburg are not among those who criticise his way of

Carter Harrison did not burn the Iroquois theater and was promptly discharged from bail. He got off easily for a Presidential aspirant.

Sugar had another drop yesterday to 3.3125. A year ago Hawaii was snuggling up to the prophecies of four cent sugar, but that was before it knew so have all been introduced.

may succeed in getting it counted.

"There is too much sugar in the The pity of it is that they are all the time making more.

Germans at Waterloo.

in English newspapers by the assertion way, we do not like to see them so made by Emperor William II., at Hanover, that the deeds of the "German Legion" had saved the English army from destruction at Waterloo. London journals seem to imagine that he German Emperor meant to say that, unless the Prussians under Blucher had come up in time, Wellington's army would have been annihilated by Napoleon. A moment's reflection should have sufficed to demonstrate that, whatever may be the private opinion of William 11. touching the importance of Blucher's arrival, he did not express it at Hanover. He was there to commemorate the deeds of the "German Legion," composed, not of Prussians, but of Hanoverians and Brunswickers, who formed a part, not of Blucher's, but of Wellingon's army. In Wellington's force at Waterloo, the Germans outnumbered the English by some 4000, and, unquestionably, but for the aid afforded by mer, the Englishmen and Dutchmen must have succumbed to the overwhelmng weight of Napoleon's columns. The Jerman Emperor was, therefore, entirely justified when he said that the Hanrians and Brunswickers had saved Wellington from destruction. As to the part played by Blucher about which William II, had nothing at all to say, there seems to be no doubt that, but for e arrival of the Prussians. Napoleon's defeat, even had it been accomplished, which is doubtful, could by no possibilhave been transformed into a rout. ellington's soldiers were utterly existed at the close of the action, and pursuit of Napoleon's broken and pairing forces was prosecuted mainly the Prussians. It is, moreover, very estionable whether Napoleon would thave crushed Wellington in the aftoon, had not the appearance of the Prussian vanguard compelled him to emy a large number of battations for protection of the French flank, This ne of the questions about which stuis of history are likely always to difbut we ourselves are disposed to k that, had Grouchy speceeded oiling Blucher's attempt to join Well-acton, the English general must have been worsted by Napoleon, who had a ce not only preponderant in quantity, him. This is where he comes off bet-its antagonists except the English, who ter than some other judges in the Ter-ritory,

THE RUSSIAN SIDE.

A staff correspondent of The Outlook has been investigating the Russian side of the Far Eastern question with results which appear in the issue of January 16th. The statements given are derived from diplomats stationed *t Washington, probably Russian and French Most of them are plausible.

It strikes the foreign envoys as sur-

prising that the sympathy of the United States, a country which wants peace, should be so generally for Japan, a country which wants war, Czar's policy is pacific. On more than one occasion of his reign he might have justly made war or at least taken a course which would have rendered war inevitable; but instead he called for general disarmament and brought about the peace tribunal at The Hague. It is he alone who has kept down the war spirit of Russia in the present The question is put: Is it to the interests of the United States to back the disturber of peace the conserver of peace? Is it quite fair to oppose the reasonable expansion of Russia within her natural sphere of influence while claiming the right to expand our own territory outside that natural sphere?

Russia has entered Manchuria not as the United States entered Mexican and Spanish territory, but with the full permission of the owner. Under its treaty rights it has constructed a great railway system there. Naturally it must protect that system just as the United States proposes to protect the line of the Panama canal. "Russian induence," says a diplomat, "has grown everywhere in Asia and this has been for the benefit of the whole world in general and of America in particular. Certainly American railway builders and equippers have no reason to complain."

What is Russia doing in Korea? What were we doing in California? Russia insists as we have done upon her right to expand in configuous territory where her interests are large and are not protected by the local government. Japan has no contiguous rights in Korea; she is an insular territory. Should she acquire Korea she could not hold it any more than England, similarly placed, could hold Normandy, Why then object to a Russian occupancy which would mean lasting peace and development and favor Japanese occupancy which would

leave Korea as a bone of contention? Quotes the Outlook:

As to the Japanese and American claim of open ports in Manchurla and Korea, the Russian reply is: "Are not the ports open now? Do you not know that we also need open ports there to secure a world's trade, and not for a few years only, but for a much longer time? Whatever our Government has pleduci to the Japanese and American Governments it will faithfully perform, The people who got in front of Gen. and of course this includes any pleases given to respect the open door. But let us at the same time call your attention to the fact that the request for river ports is peculiar. Both Japan and America have asked that Mukden be opened. Now, Mukdon is a city on a small river at a long distance from the sea. There may be some reason in the foreign demand that Niuchuang should be continued as an open port. but there is none as regards Mukden. American trade and Japanese trade do not need the latter. What would you much about the trust. Since then we think if Russia were to demand the have all been introduced. River to Albany? Yet this is what The President has undertaken to has been done in China in the case of square himself with Indianola, Miss. Hankau, hundreds of miles up the by giving it a white postmaster. He is Yangtse from the sea, and it is what Yangtse from the sea, and it is what now sure of one vote there anyhow and you now propose to do with Mukden in Manchuria, and with Wiju in Kerea, both of them towns far from the coast. You would not dare to send coast. world," remarks Willett & Gray's cir- your ships up the Neva past Petersburs Into Lake Ladoga nor up the Seine to Paris, but you do dare to pursue this policy with weak nations like China and Kores. If Japan and America would not treat a powerful A heated controversy has been started nation like ours, for instance, in this reat two weak nations over which our influence happens to be great."

Finally there comes into view the argument that Russia deserves well of the United States because of a traditional friendship which was emphasized, during the Civil War, in a way which doubtless prevented the interference of Great Britain and France on the side of the Confederacy.

He is Elijah the Wishbite because he wants a bite of any good thing the other fellow has.

There are over 3000 actors out of employment because of the effect of the Iroquois fire on the theatrical business.

Used Abusive Language. On complaint of Marion H. Hoyt, landlady of the California Hotel, Mrs. Nannie De Bolt was yesterday charged in the police court with using abusive, vulgar and obscene language. Judge Lindsay found her guilty and assessed a fine of fifteen dollars. Mrs. Hoyt stated that Mrs. De Bolt between the hours of three and three-thirty o'clock on Wednesday morning broke into Judge De Bolt's room at the hotel. Then she used the language told of in the charge. In response to a question in court she stated that she had no intention of leaving the Territory.

The question of who nominated Palmer Woods already begins to have

that Billy Patterson air. Maggie L. Walker, of Richmond, Va. the only colored woman in the world who is the president of a bank, received a Christmas present of a handsome victoria and a pair of coal black horses, the outfit costing \$800. The present is made by the Independent Order of St. Luke, of which she is grand worthy secretary of the fraternal department. She is president of the St. Luke's bank, which is one of the enterprises of the society.

LOCAL BREVITIES.

(From Wednesday's Dally.)

Honokaa has had abundant rain. T. C. Ridgway has returned to Hilo. Hawalian lighthouse keepers, now under Federal direction, may have to

pass a civil service examination. E. W. Russell, manager of the soda water works at Koloa, Kaual, is off to Ireland for a visit to his people.

The Home Rule executive committee has concluded not to appeal the County Act, but to spend the party's resources on organization for the coming election.

Japanese residents judge by letters received from relatives and friends at home that war between Russia and their country is inevitable. They claim further that a war loan would be quickly snapped up by their own people, the poor as well as the rich, scribing, so intense is patriotic ardor.

Treasurer A. N. Kepoikai left for Hawall in the Kinau to attend to the appointment of three deputy assessors on the ground, preferring this mode of action to that of corresponding with candidates and their friends by mail. The vacancies are caused by the resignations of Geo. H. Williams of Hilo, W. P. Fennell of Kau and T. C. White of Kona.

Jas. F. Morgan having gathered in a majority of Nahiku Sugar Co's stock, giving receipts therefor, the proposition made by Alexander & Baldwin at the annual meeting, as reported in the Advertiser, has been closed. Shareholders, on presenting their receipts at Alexander & Baldwin's on Friday in business hours, will receive forty cents on the dollar of their paid assessments.

(From Thursday's dally.)

Japanese women are supplying extra rations to the "Ten Dollar Club" prisoners in the penitentiary.

The next mail for San Francisco will close Monday afternoon, to be sent by the Nevadan sailing by way of Kahului.

A successor of J. W. Pratt as tax as sessor will not be appointed by Treassurer Kepolkai until after Governor Carter's return.

Col. Kuradaka, Japanese army attache at Rome, will be a passenger on the America Maru en route to Japa: having been ordered home by his go ernment to take command.

J. A. Thompson received a letter fro Kauai saying there are twenty Ja anese in jail at Lihue on suspicion connection with the dynamite outra at Makaweli whereby Glennan, the e gineer, was killed.

The House voucher committee of t Territorial grand jury is said to

Henry Vida has got next best thi to being road supervisor, in obtaini the position of assistant to Supervis Sam Johnson. Marshal Hendry has arrested thr

Japanese for peonage. They a charged with unlawfully detaining woman named Nakayama Yuki. The schooner Ada is out six wee

on her wrecking expedition to French Frigate Shoals, which is the time Ca tain Weisbarth expected to be away When the road from Kailua to N

hiku is built, there being an appr priation therefor, it is expected that large banana industry will be develo ed in East Maul.

Walmea Sugar Mill Co. held a sp cial meeting yesterday to ratify a tru deed to Castle & Cooke, Ltd., for s It was reported to the shar holders that a supply of fresh wat lately secured would materially in prove the plantation.

There is trouble in the Democra camp of Hawaii over the selection a National Committeeman. While J. McCarthy won, in a close contest a meeting in Honolulu, over Senat Palmer P. Woods, the Senator for t island of Hawaii has been nomina through a cablegram from local Den crats to the National Committee.

Shizue, one of the Japanese won who figured as a witness in the "Ten Dollar Club" trials, refused to place herself under the proffered care of the Salvation Army women who were By the Government Survey, Published eager to shelter and care for her. She preferred to be with her own people, even with those sent to jail. The Salvationist who pleaded with her in vain left the Judiciary building sorrowful.

Taft's Visit to Yokehama.

The following account of Governor Taft's visit to Yokohama on his way home, is from the Weekly Box of Curios of January 9: The members of the American Asiatic

Society were all present at the English

Hatoba at 3 p. m. on Thursday to say farewell to Governor W. H. Taft and to farewell to Governor W. H. Tait and to level, and for standard gravity of Lat. wish him bon voyage. He did not make 45. This correction is -06 for Honolulu. his appearance until nearly 4 p. m, but was known that he was having a conference at the United States Consulate with Marquis Ito, at the latter's request, all realized he was working in a good cause, so faced the cold and pa tiently awaited his coming. When he did arrive the sunshine of his smiles and his hearty greetings warmed one and all and it was a matter of pride to everyone present to see such a noble specimen of American manhood, one so ably crowned with all the noble gifts that go to make up the highest type of American statesmanship. His hearty "Hello, Paul." "Did they let you out of Singapore. Bailey?" and the recognition of the few acquaintances he made as he passed through here a few years ago on his way to Manila, fully indicated the real character of the man, and when he would break out in his hearty laugh he attracted the admiration of those who had casually met him, which explained who the hold that he has in the hearts of those who know him best. His visit is a timely one, and with the knowledge he has gained during his stay in the East, together with his interview with Marquis Ito, he will enter upon the duties of Secretary of War well able to deal with the situation. He is an able man, and we would not be at all surprised to hear of his being nominated for the Presidency some day in the future.

Itching Skin

Distress by day and night -

That's the complaint of those who are so unfortunate as to be afflicted with eczema or salt rheum -and outward applications do not cure. They can't.

The source of the trouble is in the blood-make that pure and this scaling, burning, itching skin disease will disappear.

" I was taken with an itching on my arms which proved very disagreeable. I concluded it was salt rheum and bought a bottle of Hood's Sarsaparilla. In two days after I began taking it I felt better and it was not long before I was cured. Have never had any skin disease since." Mas. IDA E. WARD, Cove Point, Md.

Hood's Sarsaparilla and Pills

Rid the blood of all impurities and cure all eruptions. Take them.

PHYS C'AN.

DR. MILAN SOULE-Office removed to 121 Geary street. Residence, Palace Hotel. San Francisco, Cal.

BUSINESS CARDS.

H. HACKFELD & CO., LTD.—General Commission Agents, Queen St., Hono-lulu, H. I.

F. A. SCHAEFER & CO.-Importers and Commission Merchants, Honolu-lu, Hawaiian Islands.

LEWERS & COOKE.—(Robert Lewers, F. J. Lowrey, C. M. Cooke.)—Import-ers and dealers in lumber and build-ing materials. Office, 414 Fort St.

HONOLULU IRON WORKS CO.—Machinery of every descrition made to order.

HONOLULU STOCK EXCHANGE.

Honolulu, January 28, 1964.

NAME OF STOCK.	Capital.	Val.	Bid	Ask
MERCANTILE.				
	\$1,000,000	100		360
SUGAR.				1557.0
Ewa Haw. Agricultural Co.	5,000.000	20	18	1914
Haw. Agricultural Co. Haw. Com, & SugarCo.	1, 00,000	100	••••	160
Hawlian Sugar Co	2,312,750 2,000,0 0	100	20	46
Honomu	750,000	100		10200
Honokaa Haiku	2,000.000	20	12	
Kahuku	500,000	20	100	20
Kehuku Kibei Plan. Co., Ltd.,	2,500,000	70		. 8
Kipahulu Koloa	180,000 500 000	100		
McBryde Sug Co., Ltd	3.500,000	100		- 2
Oahu Sugar Co	3,600,000	100		- 04
Onomea	1,000,000	20		29
Ookala Olaa Sugar Co., Ltd	5,000,000	20		
Olowaiu Pasuhan SugPlan.Co.	150,000	100		CC 1100
Pasuhan SugPlan.Co.	5,000,000	50		
Pacific Paia Pepcekeo	500,000 750,000	100	•	*****
Pepeekeo	750.000	100		180
Pioneer Walalus Agri. Co	2.750.0 0	100	:.::	85 40
Walluku	4,500,000 700,000	100		
Waimanalo	252,000	100	arr.	160
STEAMSH = Co's.				
Wilder S. S. Co	500,000	100	provide	110
Inter-Island S. S. Co.	600,000	1:0	125	
MISCELLANEOUS.		6 (
Haw, Electric Co.	500,000	100	95	10234
H. R. T. & L. Co., Pd H. R. T. & L. Co., C., Mutual Tel. Co.,	1,000,000	100		8234
Mutual Tel, Co	150,600	10	17.2	
O Ate the Art Will accessors	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100		85
Hilo R. R. Co	1, 10,000	20		
Ronds.		1		
Haw. Gov't., 5 p. c	********		97	
Haw, Jer., 4 p.c. (Fire				
Hillo R R Co . 6 p. c.				101
Hon. R. I. & L. Co.			104	1000
Ewa Plant, 6 p. c.			4414	****
Hon. R. J. & L. Co. 6 p.c. 6 p.c. 6 p.c. Ewa Plant, 6 p.c., O R. & I. Co. Oahu Plant, 6 p.c., Olas Plant, 6 p.c., Widalus Ag. Co., 6 p.c. Kahuku 6 p.c. Pigneer Mill Co., 6 p.c.	*******			10
Olan Plant, 6 p. c	11 11 1 1		****	1
Widalun Ag Co., 6 p.c				100
Kahuku 6 p. c				
righeer Mili Co., 6 p. (****	H

METEOROLOGICAL RECORD.

Every Monday

Day	January	BAROM.		THERM.		1 10	11			
		9 a. m.	Spm.	Min	Max	Rainfall 9 a. m.	Humidity	Clouds	Wind	Force
SMTWTF	17 18 19 20 21	30.08	29.97 30.08 30.02 30.01 29.96	69 72 69 70 68 70 67	75 76 76 76 76 76 76	10 10	68 70 66 66 68	5 4-7 4-7 2-4 3-8	NE NE NE NE NE NE	2-4-5-2-5-2-1-0 1-0

Barometer corrected to 32 F. and sea

TIDES, SUN AND MOON.

Days	JanFeb.	High Tide	Ht of Tide	Bigh Tide Small.	Low Tide Large.	Low Tide Small.	Sun rises.	sun sets.	Moon rises
M	25 26	p.m 10.42 11 42	Ft. 1 4 1 6	8.30 9.4	p.m. 8,20 4,17		6.39		Sets a,m. 0.44
w	27	a. m.		11.00 p.m	5.12	6.37	6.39		1.39
F	29	1 24 2 08	1.8	1,18 2,15	6.07 7.49	7.87 8.28 9.10	6,88 6,88 6,88	5.49	2.46 3.84 4.84
E.	81	2.50 8.8	2.1 2.1	3.02 3.10	8.37 9.25	9.4 10.24	6.38	5.50	5.32 Rise

Full moon February 1st at 6:02 a. m. Times of the tide are taken from the United States Coast and Geodetic Sur-

vey tables. The tides at Kahului and Hilo occur about one hour earlier than at Hono-

lulu.

Hawaiian standard time is 10 hours 30 minutes slower than Greenwich ame, being that of t | meridian of 157 degrees 20 minutes. The time whistle blows at 1:30 p. m., which is the same as Greenwich, 0 hours 0 minutes. Sun and moon are for local time for the whole group.